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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yasuki Nakajima

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06/01/2006

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EXAMINER

KANG, ROBERT N


ART UNIT

PAPER NUMBER

2625

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/047,812	Applicant(s) NAKAJIMA, YASUKI	
	Examiner Robert N. Kang	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/02/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant states that claims 1-33 are pending but the marked up copy of amended claims lists claims 28-33 as "withdrawn." Examiner assumes these claims are cancelled, however, it does not make a significant difference because the arguments to overcome rejections of these claims are unpersuasive.

Response to Arguments

2. Applicant's arguments filed 3/30/2006 have been fully considered but they are not persuasive.

Applicant makes 3 separate arguments:

I. "Murata fails to disclose or suggest the recording medium on which print subject image data and set print condition are recorded." Examiner believes this argument is based upon a misunderstanding of Murata's invention, since the Applicant states on page 13, lines 7-9, "the digital copy machine reads out the set print function from the memory card to copy, and an image to be read and copied is not read out from the memory card but set out on the digital copy [machine] as an original."

Murata discloses in paragraph 0020, "the digital copying machine further comprises means for erasing output control data **and** image data stored in the storage medium after printing the image data."

More specifically, Murata discloses in paragraph 094, the "driver generates a print job command file **and** an image data file ... **and stores the files into the memory card.**"

Therefore, both the subject image data and set print condition are recorded on the same removable storage medium.

II. "Ozawa fails to disclose or suggest print setting items being transmitted from the external printer via wireless communication and analyzing the received print setting items, to set in advance by the image processing apparatus, a print subject image and a print condition onto the recording medium. Nor does Ozawa disclose a generation unit that generates additional data relating to a print condition required upon printing by the printer based on the print setting items analyzed by the analysis unit."

Applicant states on page 14, paragraph 2, "Ozawa discloses a system in which a camera and a printer communicate with each other via wireless communication. The camera communicates with the printer to receive a print data forming software to set a print condition," as if the act of sending the software invalidates the anticipation of the current application. Examiner argues that these two features may coexist and the software transmission feature is irrelevant. Examiner is unclear how to state the anticipation by Ozawa more clearly than was already stated in the non-final rejection and therefore resorts to a chart.

Ozawa	Applicant's Claim
Receives paper size information wirelessly	"print setting items transmitted from external printer via wireless communication link"
Allows selection of only paper sizes	"analyzes print setting items transmitted

specified by printer.	from a printer via wireless communication”
Select paper size, set paper size in camera memory, then transmit image and setting to printer	“generate additional data relating to a print condition required based on setting items analyzed by the analysis unit.” And “set in advance a print subject image and a print condition onto the recording medium.”

III. “Neither Murata or Ozawa...disclose or suggest recording print setting items according to a specification of a printing unit, image processing according to the automatic print data read from the recording medium and a control unit that controls a printing process based on the automatic print data recorded in the recording medium.”

Murata discloses recording both the print data as well as print settings in a memory card, which is inserted into a digital copier, decompressed (qualifying as processed), and printed. Therefore, Murata alone actually explicitly teaches all the claim limitations. Ozawa was added simply to meet the digital camera requirement.

Thus, all 3 arguments are unpersuasive and request for traversal of rejections is wholly denied. The original rejections are re-submitted below with minor modifications to meet the modified claim limitations.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Murata (US-Pub No: US 2001/0043340 A1).

With regards to claims 1 and 12, Murata discloses in paragraph [0017], lines 5-11, a digital copying machine, with "a means for printing an image according to given image data, means for accessing a removable storage medium (e.g. a reader/writer of a memory card), and means for controlling the printing means according to output control data stored in the storage medium so that the printing means can print an image according to image data stored in the storage medium." This digital copying machine qualifies as "an image processing apparatus what permits loading and unloading of a recording medium that stores image data," as required by the preamble of claim 1.

Regarding limitations 1 and 2, Murata discloses in paragraph [0068], lines 2-6, when "a print job command file storing print control data and an image file to be printed exist in the memory card installed in PC card slot 89, this digital copying machine prints image data according to the print control data." This print control data, which details the available functions of the printer, is stored onto the memory card initially by the printer

itself, as Murata states in paragraph [0072], lines 2-5, "a user previously installs his memory card in the digital copying machine and downloads a print function information file to the memory card." Therefore, Murata's image processing apparatus contains "an analysis unit that analyzes print setting items recorded by a printer and stored in the recording medium; said print setting items relate to the function which the printer accommodates."

Finally, regarding limitation 3, Murata does not expressly disclose "a generation unit that generates additional data relating to print setting required on printing by the printer based on the print setting items analyzed by the analysis unit." However, Murata discloses in paragraph [0100], lines 10-16, the operation of his system in the case that a mechanical finisher 222 is installed, stating, "the print function information of the copying machine can be downloaded to the storage medium, so that a user can readily set all the print functions using the dialog box for setting a print function displayed on the personal computer even if he does not fully know the print functions of individual copying machines." Additionally, although Murata does not expressly specify the scenario wherein the print functions on the memory card do not match the print function of the printer, because the purpose of Murata's invention, as stated in paragraph [0023], lines 1-5, is to allow "a user [to] effectively utilize all the functions of a digital copying machine" without knowledge of each particular machine, it is assumed by the Examiner that in the case of a print function mismatch, the current printer functions are written to the memory card to ensure the functionality of Murata's invention. Therefore, Murata's invention possesses "a generation unit that generates additional data relating to print

setting required upon printing by the printer based on the print setting items analyzed by the analysis unit.”

Regarding new limitations introduced by the Applicant “**so as to be readable by an external printer,**” it is quite obvious that the image data and control data is readable by the digital copier machine for printing, which qualifies as an external printer.

Additionally, with regards to the additional limitation “**an analysis unit that reads out from the recording medium print setting items recorded by the external printer and analyzes the read-out print setting items, to set in advance by the image processing apparatus, a print subject image and a print condition onto the recording medium,**” Murata’s invention analyzes print control data to provide options for the user to select print settings. This print control data, which details the available functions of the printer, is stored onto the memory card initially by the printer itself, as Murata states in paragraph [0072], lines 2-5, “a user previously installs his memory card in the digital copying machine and downloads a print function information file to the memory card.” Thus, it is recorded by an external apparatus, and analyzed to set in advance print settings and stored with image data.

Because Murata’s invention expressly anticipates the apparatus as disclosed in claim 1, it also inherently anticipates the method of image processing utilized by the image processing apparatus, as disclosed in claim 12.

Regarding claims 2 and 13, Murata states in paragraph [0072], lines 2-5, "a user previously installs his memory card in the digital copying machine and downloads a print function information file to the memory card." Therefore, Murata's invention meets the requirement that "print setting items are recorded by the printer."

Because Murata's invention expressly anticipates the apparatus as disclosed in claim 2, it also inherently anticipates the method of image processing utilized by the image processing apparatus, as disclosed in claim 13.

With regards to claims 6 and 17, Murata depicts in Figure 5 a selection screen which allows the user to select an image filename or image file format to be printed. Murata discloses in paragraph [0068] "if a print job command file storing print control data and an image data file to be printed exist in the memory card..." This implies that a detection of both a print job command file and an image data file by the image forming apparatus. Therefore, Murata's invention "comprises an image sensing unit."

Because Murata's invention expressly anticipates the apparatus as disclosed in claim 6, it also inherently anticipates the method of image processing utilized by the image processing apparatus, as disclosed in claim 17.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozawa (US-PAT 6,115,137).

Regarding claims 23 and 26, Ozawa discloses a digital camera 10, which communicates to a printer 12, via infrared ray communication interfaces 16 and 18, respectively, through wireless transmission of data via a free space optical channel 14.

Regarding limitation 1, Ozawa discloses a CPU 20, which, as depicted in figure 12, S72, sends a request of set paper size information the printer, to which the printer responds in S73, wherein the set of available paper sizes from the printer is received. Thus the CPU qualifies as "an analysis unit that analyzes print setting items transmitted from a printer via wireless communication."

Regarding limitation 2, Ozawa discloses in column 8, lines 66-68, "FIG. 13 shows the paper size selection window. The user can manually select a desired paper size (A4, B5, and A5 in FIG. 13)." These commands are sent back to the printer as print setting commands; therefore, Ozawa's invention includes "a generation unit that generates additional data relating to print setting required upon printing by the printer based on the print setting items analyzed by the analysis unit."

Therefore Ozawa's invention meets the requirements of the apparatus claim 23 as well as its counterpart method claim 26.

Regarding claim 24, Ozawa states in column 9, lines 1-6, "the user can select one of an equal magnification print mode for printing an image independently of paper size, and an automatic variable magnification mode for automatically converting the size

of an image in correspondence with paper size and printing the size-converted mode."

Therefore, the print setting items include a zooming instruction, which is "at least one" of the instructions listed.

With regards to claim 25, Ozawa discloses a digital camera 10, which communicates to a printer 12, via infrared ray communication interfaces 16 and 18, respectively, through wireless transmission of data via a free space optical channel 14. Ozawa discloses a CPU 20, which, as depicted in figure 12, S72, sends a request of set paper size information the printer, to which the printer responds in S73, wherein the set of available paper sizes from the printer is received. Since the paper size qualifies as "print setting information," Ozawa's invention expressly anticipates "a digital camera, wherein the print setting items are transmitted through communication with the printer."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (US-Pub No: US 2001/0043340 A1).

Murata's invention meets the requirements of independent claims 1 and 12, upon which claims 3-5 and 14-16, respectively, depend.

Murata does not expressly disclose a specific file structure wherein the print setting items and automatic print data are stored in separate directories. Murata's invention, however, is able to discern between a print setting item and automatic print data (image data) automatically.

The directory file structure was well known at the time of invention (official notice), as it is one of the fundamental structures in hierarchical file storage and organization. Specifically, it is used as an organizational tool for increasing ease-of-use in operations which require human interaction.

Therefore, it would have been obvious to modify Murata's system in such a way that "the recording medium includes a directory for managing the print setting items stored by the printer independently of the image data," as disclosed by claims 3 and 14; furthermore, because the "image data" in Murata's system is printed automatically by the image forming device, it qualifies as "automatic print data," and is therefore stored in its own directory as well, as required by claims 4 and 15. Therefore, the applicant's invention is unpatentable over Murata's system with a fairly trivial file organization modification.

The motivation for this modification would be to allow clear and concise organizational file paths user management of both the print setting items and the image data itself.

Thus, it would have been obvious to modify Murata's image forming apparatus to obtain the invention as disclosed in claims 3 and 4, as well as the method utilized by the apparatus as disclosed in claims 14 and 15.

7. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (US-Pub No: US 2001/0043340 A1) in view of Canon Corporation (reference U).

The modified Murata system, which stores print setting data and automatic print (image data or image data tags) in separate directories on a memory card, meets the requirements of claims 4 and 15, upon which claims 5 and 16, respectively, depend.

Murata does not specifically disclose the use of DPOF (Digital Print Order Format) files as the "automatic print data."

Reference U states on page 3, paragraph 2, "in October 1998, four companies including Canon, Fuji Photo Film, Eastman Kodak, and Matsushita Electric Industrial, jointly announced a new standard digital printing format called DPOF (Digital Print Order Format). Therefore, the format was well known in the art to one of normal skill in the art more than one year before the time of invention.

Therefore, it would have been obvious to modify Murata's system to utilize a DPOF file for the automatic print data.

The motivation behind this modification would be to allow cross platform compatibility, "thereby minimizing cumbersome print ordering processes at the digital service photo-labs as well as for personal printing," as stated in page 3, paragraph 2 of reference U.

Thus, it would have been obvious to modify the modified Murata system as disclosed above to utilize DPOF files as taught by reference U to obtain the invention as disclosed in claim 5, as well as the method utilized by said invention, as disclosed in

claim 16.

8. Claims 7, 9, 10, 18, 20, and 21 rejected under 35 U.S.C. 103(a) as being obvious over Murata (US-Pub No: US 2001/0043340 A1) in view of Ozawa (US-PAT 6,115,137).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 7 and 18, Murata discloses a digital copying machine that permits the loading and unloading of a recording medium. When selecting images to be printed, a user inserts the medium into a PC, wherein "the printer driver refers to the

print function information file stored in the memory card to display a dialog box for setting the print function of the digital copying machine on the personal computer display,” as disclosed by Murata in paragraph [0092], lines 12-16.

Regarding limitation 1, Murata discloses in paragraph [0072], lines 2-5, “a user previously installs his memory card in the digital copying machine and downloads a print function information file to the memory card.” Therefore, it possesses a “recording unit that records print setting items according to a specification of the printing unit in the recording medium.”

In regards to limitation 2, Murata depicts in figure 5 the dialog box displayed to the user for defining automatic print control settings. Among these settings are the level of gray levels and the compression used for the file. Murata states in paragraph [0097], lines 1-5, “CPU 85 refers to the image data file name in the print job command file to read the image data file from the memory card for printing. If the image data is compressed, the CPU 85 stores the image data into page memory 84 using compressor/expander 86.” Therefore, the “image processing unit performs image processing (either grey level quantization or decompression) according to the automatic print data read from the recording medium,” as required by limitation 2.

With regards to limitation 3, Murata discloses a CPU 85 which, as disclosed in paragraph [0096], “analyzes the print job command file and performs setting required for the control circuits of the laser printer part” and prints the document. This meets the requirements that the apparatus contain “a control unit that controls a printing process

to be performed by the printing unit of the image data processed by the image processing unit based on the automatic print data recorded in the recording medium.”

Murata does not disclose that the recording medium “is mountable on a digital camera and stores image data photographed by the digital camera.” His invention discloses an image coming from a personal computer and stored on a removable media card.

Ozawa, in his description of prior art in column 1, lines 30-32, states “an image sensed by the digital camera is temporarily stored as image data in a flash memory attached to the digital camera 110.” Furthermore, removable flash memory in digital cameras was well known at the time of invention to those of normal skill in the art.

Murata and Ozawa are combinable because they both deal with transferring print settings from a printer to/from a device for digital image printing.

Therefore, it would have been obvious to one of normal skill in the art at the time of invention to replace the personal computer of Murata’s system with a digital camera with removable flash memory as taught by Ozawa and as was well known in the industry.

The motivation for this modification would be to allow seamless printing from a digital camera to an image forming apparatus without the use of a personal computer.

Thus, it would have been obvious at the time of invention to combine Murata and Ozawa to obtain the invention as disclosed in claim 7 as well as the method utilized by said invention as disclosed in claim 18. The aforementioned Murata/Ozawa combination is utilized for the remaining claim rejections in this section.

With regards to claims 9 and 20, Murata discloses in paragraph [0092], lines 9-11, "a memory card to which a print function information file is downloaded." This memory card contains information written by the printer to be utilized, and thus the "print setting items include print function data of the printing unit," as required by claims 9 and 20.

In regards to claims 10 and 21, Murata depicts in figure 5 a display panel displayed to the user for selecting parameters which comprise the print function data. Among these settings are "BothSidePrinting" and "Staple" with various "StaplePositions." Therefore, "the print function data includes at least one of a staple function data and two-side print function data," as required by claims 10 and 21.

9. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (US-Pub No: US 2001/0043340 A1) in view of Ozawa (US-PAT 6,115,137).

The aforementioned Murata/Ozawa combination meets the requirements of claims 7 and 18, upon which the rejected claims depend.

Murata does not expressly disclose a specific file structure wherein the print setting items and automatic print data are stored in separate directories. Murata's invention, however, is able to discern between a print setting item and automatic print data (image data) automatically.

The directory file structure was well known at the time of invention (official notice), as it is one of the fundamental structures in hierarchical file storage and organization. Specifically, it is used as an organizational tool for increasing ease-of-use in operations which require human interaction.

Therefore, it would have been obvious to modify the Murata/Ozawa system in such a way that “the recording unit records the print setting items in a directory independent of a directory that stores the image data,” as disclosed by claims 8 and 19.

The motivation for this modification would be to allow clear and concise organizational file paths user management of both the print setting items and the image data itself.

Thus, it would have been obvious to modify Murata’s image forming apparatus to obtain the invention as disclosed in claims 3 and 4, as well as the method utilized by the apparatus as disclosed in claims 14 and 15.

10. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata (US-Pub No: US 2001/0043340 A1) in view of Ozawa (US-PAT 6,115,137) further in view of Canon Corporation (reference U).

The aforementioned Murata/Ozawa combination meets the requirements of claims 7 and 18, upon which the rejected claims depend.

Murata does not specifically disclose the use of DPOF (Digital Print Order Format) files as the “automatic print data.”

Reference U states on page 3, paragraph 2, "in October 1998, four companies including Canon, Fuji Photo Film, Eastman Kodak, and Matsushita Electric Industrial, jointly announced a new standard digital printing format called DPOF (Digital Print Order Format). Therefore, the format was well known in the art to one of normal skill in the art more than one year before the time of invention.

Therefore, it would have been obvious to modify Murata's system to utilize a DPOF file for the automatic print data.

The motivation behind this modification would be to allow cross platform compatibility, "thereby minimizing cumbersome print ordering processes at the digital service photo-labs as well as for personal printing," as stated in page 3, paragraph 2 of reference U.

Thus, it would have been obvious to modify the Murata/Ozawa system as disclosed to utilize DPOF files as taught by reference U in order to obtain the invention as disclosed in claim 11, as well as the method utilized by said invention, as disclosed in claim 22.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

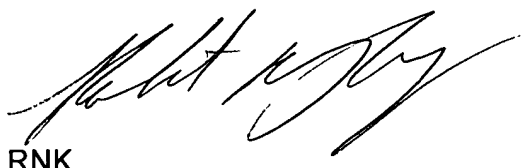
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner would like to inform the applicant that art unit 2622 has been re-designated as art unit 2625 due to organizational restructuring with the Patent & Trademark Office. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is 571-272-0593. The examiner can normally be reached on M-F 9-6.

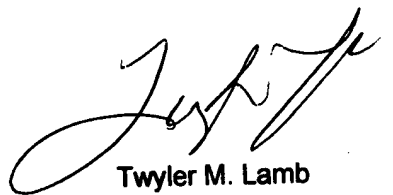
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be "RNK" or similar, written in a cursive style.

RNK

A handwritten signature in black ink, appearing to be "Twyler M. Lamb", written in a cursive style.
Twyler M. Lamb
Supervisory Patent Examiner